



Clean Copy of Specification Paragraphs as Amended (2)

Clean copy of paragraph bridging pages 5 and 6 of specification as amended:

Brief Description of the Drawings

FIG. 1 is a graph of the result of a short (seven hour) desulfurizer bed test run with three different modified formulations of California Certified Gasoline showing the sulfur level in parts per million (ppm) at the reactant bed exit for the various gasoline formulations, versus the test run operating time in hours;

FIG. 2 is a graph of the results of a longer desulfurizer bed test run (about four hundred eighty five hours) with unmodified California Certified Gasoline showing the sulfur level in the gasoline in ppm at the nickel reactant bed exit, versus the operating time in hours;

FIG. 3 is a graph of the results of the same desulfurizer bed test run shown in FIG. 2, but showing the oxygenate level in the gasoline, in percent by weight, at the reactant bed exit, versus the test run operating time in hours;

FIG. 4 is a graph of the result of a desulfurizer bed test run with a commercially available gasoline showing the sulfur level in ppm at the nickel reactant bed exit versus the operating time of the desulfurizer in hours;

FIG. 5 is a graph of the result of several different duration desulfurizer bed test runs using different modified formulations of California Certified Gasoline, one with, and one without oxygenates, and showing the carbon level (in percent by weight) which was deposited on the reactant in each successive section of the desulfurizer at the end of the test runs;

FIG. 6 is a graph of the sulfur content of the exit stream of a desulfurized gasoline fuel stream over a period of time at varied operating temperatures, when a small amount of water is present, and when no water is present, in the fuel stream; and

FIG. 7 is a graph of the operating temperatures of the system described in FIG. 6 over the same period of time.

Clean copy of the paragraph bridging pages 10 and 11 as amended

The desulfurization system of this invention can be positioned aboard a vehicle. The system includes a fuel line from the vehicle gas tank to a pump which pumps the fuel

through a line to the desulfurizer bed. The bed is heated to operating temperatures by an electric heater. The desulfurized gasoline passes from the desulfurizing bed through a line to the fuel cell power plant where the desulfurized fuel is further processed and converted to electricity for powering the vehicle.